

## Programme of the Galapagos Science Symposium

<b>MONDAY, JULY 20: Evolutionary Biology with a Focus on Small Islands</b>			
	TIME	TITLE	AUTHORS*
<b>Chair:</b> <b>Matthias Wolff</b>	09:00 – 10:00	Turning points in evolution.	Irenaeus Eibl-Eibesfeldt
	10:00 – 11:00	Research on evolutionary principles in Galapagos: an overview of the past 50 years.	Carlos Valle
	11:00 – 11:30	Coffee Break	
	11:30 – 12:30	Collecting evolution: the untold story of the vindication of Charles Darwin by the 1905-06 Galapagos expedition of the California Academy of Sciences.	Matthew James
Morning			
	12:30 - 14:00	Lunch	
<b>Chair:</b> <b>Sharon Deem</b>	14:00 - 15:00	Evolution of the human society at Galapagos since the first colonizers until today.	Christophe Grenier
	15:00 - 15:15	Coffee Break	
	15:15 - 15:35	Evolution of pathogens of Galapagos birds.	Patricia G. Parker
	15:35 - 15:55	Evolution in 3 dimensions – biodiversity of pelagic midwater and deep-sea communities.	<u>Holger Auel</u> & Silke Laakmann
	15:55 - 16:15	What Darwin found convincing in Galapagos, and why it matters.	William Durham
	16:15 - 16:35	General Discussion	
	16:35 - 17:00	Coffee Break	
	17:00 - 17:20	Popularization of evolution to kids.	Nicolás Cuvi
	17:20 - 17:40	Using molecular markers to define conservation management strategies: the critically endangered <i>Calandrinia galapagosa</i> from San Cristobal island.	<u>Patricia Jaramillo</u> , Rachel Atkinson, Frank Cipriano & Jefreys Málaga
	17:40 - 18:00	Distribution and taxonomic composition of zooplankton in the Galapagos Marine Reserve.	<u>Nathalia Tirado-Sánchez</u> , Matthias Wolff & Stuart Banks
Afternoon			

\* The name of the author who gives the presentation is underlined

<b>TUESDAY, JULY 21: Biodiversity Monitoring</b>			
	TIME	TITLE	AUTHORS*
<b>Chair:</b> <b>Diego Ruiz</b>	09:00 – 10:00	Galapagos biodiversity – what we still do <i>not</i> know about life on the Enchanted Isles.	<u>Frank Bungartz</u> , P. Jaramillo, H. Herrera, G. Jiménez, D. Ruiz, N. Tirado & F. Ziemmeck
	10:00 – 11:00	Biodiversity of the Galapagos Marine Reserve: status of the present knowledge.	Rodrigo Bustamante
	11:00 – 11:30	Coffee Break	
	11:30 – 12:30	Methodological approaches for biodiversity	James Gibbs
Morning			

		monitoring: challenges and pitfalls.	
	12:30 - 14:00	Lunch	
Chair: Anne Guezou         Afternoon	14:00 - 14:20	Distribution of avian pox in Galapagos.	<u>Gustavo Jiménez Uzcátegui</u> , David A. Wiedenfeld, Patricia Parker, Nicole Gottdenker & F. Hernán Vargas
	14:20 - 14:40	Distribution and abundance of <i>Cetaceans</i> off the Ecuadorian continental coast and in the Galapagos Marine Reserve.	<u>Judith Denking</u> , Annika Krutwa, Godfrey Merlen & Sandie Salazar
	14:40 - 15:00	Monitoring species to detect and predict impact of global change: case of the birds monitoring program in France.	Celine Teplitsky
	15:00 - 15:15	Coffee Break	
	15:15 - 15:35	Health status of the coral communities of the northern Islands: Darwin, Wolf and Marchena of the Galapagos archipelago.	<u>Mariana Vera</u> & Stuart Banks
	15:35 - 15:55	Satellites, seabirds and seals - a 25 year retrospective.	Gene Carl Feldman
	15:55 - 16:15	Quantifying the freshwater dynamics: a key to hydro-ecology understanding in Galapagos.	<u>Noemi d'Ozouville</u> , M. Trueman, S. Rea, S. Violette, A. Pryet, G. de Marsily & B. Deffontaines
	16:15 - 16:35	Impacts of Urchin diversity on Algal Biomass in the Galapagos Marine Reserve (GMR).	<u>Margarita Brandt</u> , Jon D. Witman & Angel Chiriboga
	16:35 - 17:00	Coffee Break	
	17:00 - 17:20	Monitoring ecological change in the Galapagos ecosystem: benefits and challenges of using seabirds as bio-indicators.	<u>Kyra L. Mills</u> & William J. Sydeman
	17:20 - 17:40	Ecological status of a mangrove-fringed lagoon in SE Asia affected by human activities.	<u>Inga Nordhaus</u> , Simon Geist, Saskia Hinrichs, Tim Jennerjahn & Edy Yuwono
	17:40 - 18:00	Distribution of larvae of spiny lobster in the Galapagos Marine Reserve (GMR)	<u>Jerson Moreno</u> & Eduardo Espinoza

WEDNESDAY, JULY 22: Understanding System Resilience: quantification and modeling of system dynamics			
	TIME	TITLE	AUTHORS*
Morning	09:00 - 12:00	Field trip to El Chato tortoise reserve	
	12:30 - 14:00	Lunch	
Chair: Matthias Wolff	14:00 - 15:00	The role of modeling in conservation science.	Uta Berger
	15:00 - 15:15	Coffee Break	
	15:15 - 16:15	How to measure system resilience – comparing marine and terrestrial systems.	Broder Breckling
	16:15 - 16:35	Connectivity and upwelling dynamics in the Galapagos Marine Reserve (GMR).	<u>John M. Morrison</u> , Stuart Banks, Daniel Kamykowski,

Afternoon	16:35 - 17:00	Coffee Break	Lian Xie & Gene Feldman
	17:00 - 17:20	Testing trophic cascades in the Galapagos Marine Reserve (GMR): an experimental approach.	<u>Jon D. Witman</u> , Margarita Brandt & Laura E. Dee
	17:20 - 17:40	Effects of herbivory intensity and productivity on species richness, diversity and biomass of primary producers on Galapagos rocky shore communities.	<u>Luis R. Vinuesa</u> , Diego J. Ruiz & Bruce A. Menge
	17:40 - 18:00	Shark movements and the design of protected pelagic environments within and beyond the Galapagos Marine Reserve.	<u>James Ketchum</u> , Alex Hearn, George Shillinger, Eduardo Espinoza, César Peñaherrera & Peter Klimley

<b>THURSDAY, JULY 23: The Need to Reconcile Biodiversity Conservation with Socio-economic Development</b>			
	TIME	TITLE	AUTHORS*
<b>Chair:</b> <b>Mark Gardener</b>  Morning	09:00 – 10:00	The needs and limits for economic valuation of biodiversity conservation.	R.Costanza & Marjan van den Belt
	10:00 – 11:00	Tapping the potential of coastal communities for improving livelihoods and conservation in Pacific.	H. Govan
	11:00 – 11:30	Coffee Break	
	11:30 – 12:30	The role of education programs to foster Nature conservation - what has been learned?	Christian Nielsen
	12:30 - 14:00	Lunch	
<b>Chair:</b> <b>Carlos F. Mena</b>  Afternoon		<b>CONCURRENT SESSION 1: Population-Environment Interactions in the Galapagos Islands</b>	
	14:00 - 14:20	Why Galapagos is not a social-ecological system.	Christophe Grenier
	14:20 - 14:40	Visitor Management in the Galapagos National Park: a tool to improve biodiversity conservation?	Gunther Reck
	14:40 - 15:00	Vulnerability and resilience of the Galapagos society: implications of social, economic, and cultural capital to exogenous shocks	<u>Diego Quiroga</u> , Carlos F. Mena, Haruna Suzuki & Alexander Guevara
	15:00 - 15:15	Coffee Break	
	15:15 - 15:35	Invasive species in the Galapagos Islands: thinking beyond biophysical explanations.	Laura Brewington & Amy L. McCleary
	15:35 - 15:55	Demographic and social data needs for the Galapagos Archipelago.	Ronald R. Rindfuss
	15:55 - 16:15	Urban change in the Galapagos Islands: assessment and implications to the human-environmental system.	Carlos F. Mena
	16:15 - 16:35	Complexity theory and spatial simulation models to assess population-environment interactions in the Galapagos Islands.	Stephen J. Walsh
	16:35 - 17:00	Coffee Break	
<b>Chair:</b> <b>Felipe Cruz</b>	17:00 - 18:00	Both concurrent sessions in plenary discussion	
	14:00 - 14:20	<b>CONCURRENT SESSION 2:</b> Interdisciplinary research upon an exploited mangrove crab and first steps towards successful	Karen Diele



Afternoon	14:20 - 14:40	co-management in North Brazil. Sense of place and environmentally responsible behavior at an ecoregional scale.	Nicole M. Ardoin
	14:40 - 15:00		
	15:00 - 15:15	Coffee Break	
	15:15 - 15:35	Environmental education in the Galapagos: Where do we go from here?	Carl M. Stepath
	15:35 - 15:55	Socio-ecological systems and biochemical fluxes in the Galapagos Islands.	<u>Mercy J. Borbor-Cordova</u> , Alisha Fernandez & Elizabeth Holland
	15:55 - 16:15	Increasing the capacity of local actors to manage complex social-ecological systems: application of scoping models in the Galapagos Islands.	Neil Collier, Marieke Sandker, Stephen T. Garnett, <u>Arturo Izurieta</u> , Jeff Sayer & Bruce M. Campbell
	16:15 - 16:35	Flood control: how tourism brought globalization to Galapagos and must now Help control it.	William Durham
	16:35 - 17:00	Coffee Break	
	17:00 - 18:00	Both concurrent sessions in plenary discussion	

FRIDAY, JULY 24: Restoration of Ecosystems: concepts and tools for self-sustaining systems			
	TIME	TITLE	AUTHORS*
Chair: <b>Grant Harper</b>  Morning	09:00 – 10:00	Restoration of degraded systems: possibilities and limits.	Richard Hobbs
	10:00 – 11:00	An ecosystem approach to marine restoration.	Mike Elliott
	11:00 – 11:30	Coffee Break	
	11:30 – 12:30	Eradication programs worldwide and their success: an overview.	Felipe Cruz
	12:30 - 14:00	Lunch	
Chair: <b>Rachel Atkinson</b>  Afternoon	14:00 - 14:20	Anthropogenic effects on the ecosystem of the Bonin Islands and its restoration.	<u>Kazuto Kawakami</u> , Hajime Suzuki & Isamo Ohkochi
	14:20 - 14:40	Towards optimal management of the invasive <i>Rubus niveus</i> for habitat restoration in the Galapagos.	Jorge Luis Renteria
	14:40 - 15:00	Finding a sustainable approach for managing an invasive 'Protean' species in the Galapagos archipelago: A study of <i>Rubus niveus</i> .	<u>Jacqueline St.Quinton</u> , M. Ingrouille, M. Fay and J. Nicklin
	15:00 - 15:15	Coffee Break	
	15:15 - 15:35	The alien flora of the inhabited areas of Galapagos: practical solutions to reduce the risk of invasion into the National Park.	<u>Anne Guézou</u> & Mandy Trueman
	15:35 - 15:55	A trophic model of the Bolivar Channel for conservation strategies.	<u>Diego Ruiz</u> & Matthias Wolff
	15:55 - 16:15	Invasion and control of the introduced quinine tree in Galapagos: long-term impacts on the native vegetation of Santa Cruz Island.	<u>Heinke Jäger</u> , Ingo Kowarik & Alan Tye
	16:15 - 16:35	Successful eradication of feral cats from sub-	<u>Marthán Bester</u> , J.P.

		antarctic Marion Island, southern Indian Ocean.	Bloomer, R.J. van Aarde, B.H. Erasmus, P.J.J. van Rensburg, J.D. Skinner, P.G. Howell & T.W. Naude
	16:35 - 17:00	Coffee Break	
	17:00 - 17:20	Marine protected areas in Latin America: is the Galapagos Marine Reserve leading marine conservation initiatives in the region?	<u>Paulina Guardas</u> , Sally D. Hacker & J. Lubchenco
	17:20 - 17:40	Palaeoecology of the Galapagos Islands: applications to modern conservation management.	<u>Cynthia A. Froyd</u> , Katherine J. Willis, Emily E. Coffey, Alistair Seddon, Jacqueline F.N. van Leeuwen, W.O. van der Knaap, & Alan Tye
	17:40 - 18:00		

POSTER PAPERS		
	TITLE	AUTHORS*
1	Preparing for climate change impacts on the Galapagos: from scientific knowledge to adaptation strategies.	<u>Noemi dÓzouville</u> , F. Ortiz, G. Di Carlo & E. Pidgeon
2	A novel multi-proxy approach for determining baseline ecological conditions: a case study of the Galapagos Islands	<u>Emily E. Coffey</u> , Katharine J. Willis & Cynthia A. Froyd
3	How to harvest the Galapagos sea cucumber stock? - Lessons learnt from a decade of unsustainable fishing.	Matthias Wolff, Mauricio Castrejon & <u>Anna Schuhbauer</u>
4	Habitat preferences of the juvenile sea cucumber <i>Isostichopus fuscus</i> in Fernandina Island, Galapagos.	Priscilla C. Martinez
5	The first marine reserve in mainland Ecuador: Galera-San Francisco, Esmeraldas Province. What can we learn from Galapagos?	<u>Soledad Luna</u> , Pippa Heylings & Maria Cristina Puente
6	Preliminary data from the first GPS tracking study of giant Galapagos tortoises.	<u>Stephen Blake</u> & Martin Wikelski
7	A realistic restoration endpoint for degraded highlands of Galapagos.	<u>Mark Gardener</u> & Rachel Atkinson
8	Successful experience of involving childhood, science and ecosystem complexity at the Galapagos Islands.	<u>Nathalia Tirado</u> , Reyna Oleas, Karla Markley & Karina Bautista
9	Economic value of biodiversity through traceability.	Elias Mulugeta
10	Mapping terrestrial anthropogenic degradation on the inhabited islands of the Galapagos archipelago.	<u>Mandy Trueman</u> , James Watson, Marta Tufet, Scott Henderson & Rachel atkinson
11	Feeding ecology of the green sea turtle, <i>Chelonia mydas</i> , in the Galapagos Islands.	<u>Javier A. Carrión</u> , P. Zárate & J.A. Seminoff
12	Enhancing student learning and awareness of ecological and environmental issues.	Kevin Kinney
13	Investigating temporal changes in Galapagos	John Paul Tiernan